

Fault Detection in Transformer Using GSM Technology

<https://www.youtube.com/watch?v=oe9ZxbXvYCs>

The main aim of the project is to design GSM based transformer fault detection and IoT based monitoring system. It will provide a shorter response time for technical crew to rectify these faults and thus help to save transformers from damage and crash.

To design this project the current transformer, a voltage transformer, ESP8266 module, and a GSM modem are interfaced to Microcontroller. This system automatically finds faults and sending the information to the respective authorities in the form of SMS through GSM. The data will be displayed on the LCD and sensing this data to the user mobile through ESP8266 WI-FI module.

This project makes use of an onboard computer which is commonly termed as microcontroller. This onboard computer can efficiently communicate with the different sensors being used. The controller is provided with some internal memory to hold the code. This memory is used to dump some set of assembly instructions into the controller. And the functioning of the controller is dependent on these assembly instructions. The controller is programmed using Embedded C language.

Major blocks present in this project:

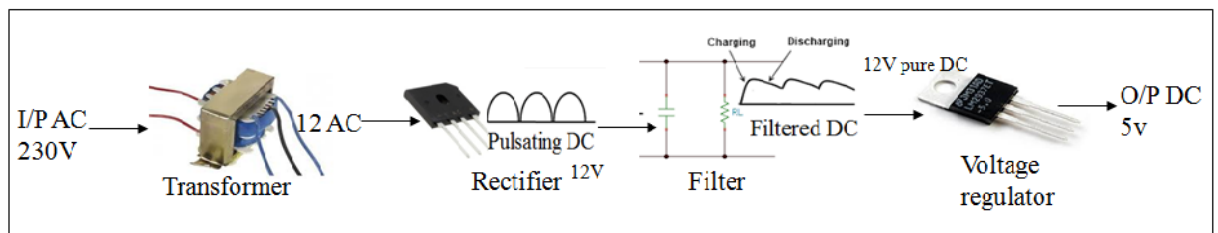
1. Regulated power supply
2. Micro controller
3. GSM Module
4. ESP8266 Module
5. Current Transformer
6. Voltage Transformer

7. LED Indicator
8. Crystal Oscillator
9. Reset Button

Software's used in this project:

1. PIC Compiler for Programming.
2. Express SCH for Circuit design.

Regulated power supply:



Block Diagram:

